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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,874	10/31/2003	Stephen Philip Cheatle	1509-455	8999

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EXAMINER

LIVEDALEN, BRIAN J

ART UNIT PAPER NUMBER

2878

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/697,874

Applicant(s)

CHEATLE, STEPHEN PHILIP

Examiner

Brian J. Livedalen

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

Claims 1-12 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimono et al. (JP 10153946) in view of Tsuboi et al. (5610678).

In regard to claims 1 and 4, Shimono discloses (fig 1) an image capture device (16), a detector arrangement for detecting the relative motion of the head and body of a person (10 and 11), and a combiner (13) adapted to be coupled with the image capture device and the detector arrangement for moving a field of view adapted to be captured by the image capture device according to the detected relative motion of the head and body of a person. Shimono remains silent regarding the image capture device to be body-mountable. However, Tsuboi discloses (fig. 1) a body-mountable image capture device (302) , a camera, that is actuated according to the movement of the individual's head (column 2, lines 53-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the body mounting of Tsuboi to the image capture device of Shimono so that the image capture device would capture the image viewed by the individual.

In regard to claim 2, Shimono in view of Tsuboi discloses (Shimono fig. 1) separate motion detectors for the head (10) and the body (11) of the person.

In regard to claim 3, Shimono in view of Tsuboi discloses (Shimono fig. 1) motion detectors for the head (10) and the body (11) of the person, and the motion detectors are adapted to be mounted on the person.

In regard to claim 5, Shimono in view of Tsuboi discloses (Shimono fig. 1) a computing device (13), which includes the combiner (paragraph 0032).

In regard to claim 6, Shimono in view of Tsuboi discloses (Shimono fig. 1) a combiner, which includes an image capture device adjustment section to move the field of view of the image capture device (paragraphs 0032 and 0033).

In regard to claim 7, Shimono in view of Tsuboi discloses (Shimono fig. 1) a combiner, which is adapted to respond to the detector arrangement and to derive an indication rotation of the head of the user relative to the body of the user, and the image capture device adjustment section is operable to move the field of view of the image capture device by an amount corresponding to the indication of head rotation relative to the body of the user (paragraphs 0033 and 0034).

In regard to claim 8, Shimono in view of Tsuboi discloses (Shimono fig. 1) a combiner, which is adapted to respond to the detector arrangement and to derive an indication rotation of the head of the user relative to the body of the user, and the image capture device adjustment section is operable to move the field of view of the image capture device by an amount greater than the head rotation relative to the body of the user (paragraphs 006, 0034).

In regard to claim 9, Shimono in view of Tsuboi discloses (Shimono fig. 1) motion detectors for the head (10), and the motion detector is operable to be secured to the head of the person.

In regard to claim 10, Shimono in view of Tsuboi discloses (Shimono fig. 1) motion detectors for the head (10) but remains silent to whether or not the motion detector is operable to detect lateral rotation of the user. However, Tsuboi further discloses a head motion detector that is operable to detect lateral rotation (column 27, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the lateral rotation detecting of Tsuboi to the image capture device of Shimono in view of Tsuboi in order to more effectively capture the image viewed by the individual.

In regard to claim 11, Shimono in view of Tsuboi Tsuboi discloses the invention as set forth above but fails to disclose the motion sensor included in the image capture device. However, it is of routine skill in the art to make separate components integral. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the image capture device and the motion sensor to make the invention more compact.

In regard to claim 12, Shimono in view of Tsuboi discloses the invention as set forth above but fails to disclose a distance sensor. However, Tsuboi further discloses a distance sensor for correction of parallax errors (column 10, lines 41-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the distance finder of Tsuboi to the image capture device of Shimono in view of

Tsuboi in order to provide a range finder to focus the camera and correct parallax errors.

In regard to claim 14, Shimono in view of Tsuboi discloses (Shimono fig. 1) motion detectors for the head (10) but remains silent to whether or not the motion detector is operable to detect a tilting away from the horizontal. However, Tsuboi further discloses a head motion detector that is operable to detect a tilting away from the horizontal (column 27, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the tilting detecting of Tsuboi to the image capture device of Shimono in view of Tsuboi in order to more effectively capture the image viewed by the individual.

In regard to claims 15 and 16 Shimono discloses (fig. 1) an image capture device including the method of detecting motion of the head relative to the body and moving a field of view of the image capture device according to the detected motion of the head with respect to the detected motion of the body. Shimono remains silent regarding the image capture device to be body-mountable. However, Tsuboi discloses (fig. 1) a body-mountable image capture device (302) that is actuated according to the movement of the individual's head and secured to the trunk of the body (column 2, lines 53-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the body mounting of Tsuboi to the image capture device of Shimono so that the image capture device would capture the image viewed by the individual.

In regard to claim 17, Shimono in view of Tsuboi discloses (Shimono fig. 1) the field of view of the image capture device is moved by an amount corresponding to the indication of head rotation relative to the body of the user (paragraphs 00333 and 0034).

In regard to claim 18, Shimono in view of Tsuboi discloses (Shimono fig. 1) the field of view of the image capture device being moved by an amount greater than the head rotation relative to the body of the user (paragraphs 006, 0034).

In regard to claim 19, Shimono in view of Tsuboi discloses (Shimono fig. 1) detecting the motion of the head (10) but remains silent to whether or not the motion detector is operable to detect lateral rotation of the user. However, Tsuboi further discloses a head motion detector that is operable to detect lateral rotation (column 27, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the lateral rotation detecting of Tsuboi to the image capture device of Shimono in view of Tsuboi in order to more effectively capture the image viewed by the individual.

***Allowable Subject Matter***

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose or make obvious the calibrator operable to calibrate a forward direction in response to an indication of an average output of the motion detector arrangement as set forth in claim 13.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bjl

  
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